

CLAIMS

1. An application framework under which product applications are configured and manipulated, comprising:-
- 5
- (a) application objects providing respective basic information processing functions for use in a product application, each application object containing its processing function within a standard interface with the inputs and output(s) of which the processing function communicates without regard to the connections of those inputs and output(s),
- 10
- (b) an architectural structure in which:-
- 15
- application objects are organised into a hierarchy, the application objects being in parent/child relationship one to another in the hierarchy, and the hierarchy comprising an assembly of application objects capable of providing for a product application an application function built from the basic information processing functions of the objects,
- 20
- and
- 25
- data dependencies between application objects are established by means of connections between standard interface inputs and output(s) of application objects,
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- whereby the hierarchy can be modified at run-time, and data dependency connections can be set up and/or deleted at run-time.
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2. An application framework as claimed in claim 1, wherein different parts of the hierarchy are

contained or run in respective different containers which each provide a single processing thread for the application objects of the part-hierarchy concerned and provide a single input messaging thread for communication with those objects, whereby the containers can be run in a distributed manner on respective different machines or processes.

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10 3. A method of configuring and manipulation information processing applications, comprising:-

(a) creating application objects providing respective basic information processing functions for use in an information processing application, each application object containing its processing function within a standard interface with the inputs and output(s) of which the processing function communicates without regard to the connections of those inputs and output(s),

20 (b) creating an architectural structure in which:-

25 application objects are organised into a hierarchy, the application objects being in a logical parent/child relationship one to another in the hierarchy, and the hierarchy comprising an assembly of application objects capable of providing for the information processing application an application function built from the basic information processing functions of the objects, and

30
35 data dependencies between application objects are established by means of connections between standard interface inputs and output(s) of application objects,

whereby the hierarchy can be modified at run-time, and data dependency connections can be set up and/or deleted at run-time.

5 4. A computer program providing an application framework
under which product applications are configured and
manipulated, the computer program being operable to
assemble into an architectural structure application
objects providing respective basic information
10 processing functions for use in a product
application, each application object containing its
processing function within a standard interface with
the inputs and output(s) of which the processing
function communicates without regard to the
15 connections of those inputs and output(s),

the architectural structure being such that:-

20 application objects are organised into a hierarchy,
the application objects being in parent/child
relationship one to another in the hierarchy, and
the hierarchy comprising an assembly of application
objects capable of providing for a product
application an application function built from the
25 basic information processing functions of the
objects, and

data dependencies between application objects are
established by means of connections between standard
30 interface inputs and output(s) of application
objects,

whereby the hierarchy can be modified at run-time, and
data dependency connections can be set up and/or deleted
35 at run-time.

5. A computer program as claimed in claim 4, further

comprising a library of application objects available
for implementation in the hierarchy.

6. A computer program as claimed in claim 4 or 5, providing
5 means of visualizing the hierarchy as a tree structure.